

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>M/IR/300985WO</b>	<div style="display: flex; justify-content: space-between;"> <div><b>FOR FURTHER ACTION</b></div> <div>See Form PCT/IPEA/416</div> </div>	
International application No. <b>PCT/AU2004/001072</b>	International filing date ( <i>day/month/year</i> ) <b>11 August 2004</b>	Priority date ( <i>day/month/year</i> ) <b>17 November 2003</b>
International Patent Classification (IPC) or national classification and IPC Int. Cl. <sup>7</sup> <b>G06F 17/60</b>		
Applicant <b>NGA SOFTWARE CORPORATION (INTERNATIONAL) LIMITED et al</b>		

  

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <b>3</b> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: <div style="margin-left: 20px;"> a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <b>5</b> sheets, as follows: <div style="margin-left: 20px;"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).  <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. </div> </div> <div style="margin-left: 20px;"> b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). </div>
4.	This report contains indications relating to the following items: <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> Box No. I      Basis of the report  <input type="checkbox"/> Box No. II      Priority  <input type="checkbox"/> Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  <input type="checkbox"/> Box No. IV      Lack of unity of invention  <input checked="" type="checkbox"/> Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  <input type="checkbox"/> Box No. VI      Certain documents cited  <input type="checkbox"/> Box No. VII      Certain defects in the international application  <input type="checkbox"/> Box No. VIII      Certain observations on the international application </div>

  

Date of submission of the demand <b>18 November 2004</b>	Date of completion of the report <b>13 January 2005</b>
Name and mailing address of the IPEA/AU <b>AUSTRALIAN PATENT OFFICE  PO BOX 200, WODEN ACT 2606, AUSTRALIA  E-mail address: pct@ipaaustralia.gov.au  Facsimile No. (02) 6285 3929</b>	Authorized Officer  <b>MATTHEW HOLLINGWORTH</b> Telephone No. (02) 6283 2024

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1 (b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-2, 5-17 as originally filed/furnished
- pages\* 3-4 received by this Authority on 18 November 2004 with the letter of the same date
- pages\* received by this Authority on with the letter of
- ☒ the claims:
- pages as originally filed/furnished
- pages\* as amended (together with any statement) under Article 19
- pages\* 18-20 received by this Authority on 18 November 2004 with the letter of the same date
- pages\* received by this Authority on with the letter of
- ☒ the drawings:
- pages 1-10 as originally filed/furnished
- pages\* received by this Authority on with the letter of
- pages\* received by this Authority on with the letter of
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to the sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2004/001072

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1-13	YES
	Claims	NO
Inventive step (IS)	Claims 1-13	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-13	YES
	Claims	NO

## 2. Citations and explanations (Rule 70.7)

- D1: WO 2003/ 065254 A1 (THE CUBE FINANCIAL GROUP PTY LTD) 7 August 2003
- D2: WO 1997/041654 A1 (TELEFONAKTIEBOLAGET LM ERICSSON) 6 November 1997
- D3: US 2003/0028461 A1 (KOHORN) 6 February 2003
- D4: WO 2001/042884 A2 (FINKELMAN) 14 June 2001

The above documents represent the closest available prior art. The features of the claims are not disclosed by these documents, or by any others published before the earliest priority date. In particular, the automatic recalculation of the RVLs once an alert has been triggered appears to be a novel and inventive feature.

AP20 Rec'd PCT/PTO 16 MAY 2006

"Variable", as used herein, includes the price of shares, futures or options on a stock exchange (such as the Australian Stock Exchange), a timetabled event, or the like.

**Summary of the Invention:**

- 5 In accordance with the invention there is provided a variable momentum monitoring system including the steps of:
- receiving from a user an identification of a required variable data input;
- obtaining the current live static value (LSV) of the identified required data input from a dynamic live data-stream and determining it as a base reference input (RI);
- 10 calculating at least two sets of one or more incremental reference variable levels (RVLs) using the determined RI, one of the sets having values less than the RI and the other set having values greater than the RI;
- searching dynamic live data values (LDV) of the identified required data and comparing with the reference variable levels (RVLs);
- 15 communicating to the user when the current live value of the identified required data matches with any of the reference variable levels (RVLs);
- defining the outer reference variable level points as reset points such that when the current live value of the identified required data matches with one of the outer reference variable levels the RI is automatically reset and new reference variable
- 20 levels (RVLs) are automatically calculated without the need for end-user input.

**Preferred Embodiments of the Invention:**

- Preferably, when a LDV matches a RVL, an advice message is generated and
- 25 communicated to the user.

In a preferred embodiment of the invention, the system will capture the LSV of a required data input (where  $LSV = RI$ ) and use it to calculate the RVLs. The RVLs will be calculated as predetermined variations from the captured RI.

- 30 It can be seen that the system shows the change over time by communicating different variable matches. Therefore if the variable continues to increase there will have been

**Claims:**

1. A variable momentum monitoring system including the steps of:  
receiving from a user an identification of a required variable data input;  
obtaining the current live static value (LSV) of the identified required data input from a dynamic live data-stream and determining it as a base reference input (RI);  
calculating at least two sets of one or more incremental reference variable levels (RVLs) using the determined RI, one of the sets having values less than the RI and the other set having values greater than the RI;  
searching dynamic live data values (LDV) of the identified required data and comparing with the reference variable levels (RVLs);  
communicating to the user when the current live value of the identified required data matches with any of the reference variable levels (RVLs);  
defining the outer reference variable level points as reset points, such that when the current live value of the identified required data matches with one of the outer reference variable levels the RI is automatically reset and new reference variable levels (RVLs) are automatically calculated without the need for end-user input..
2. A system according to claim 1 in which when a LDV matches a RVL, an advice message is generated and communicated to the user.
3. A system according to claim 2 in which the LSV of a required data input (where LSV = RI) is captured and used to calculate the RVLs.
4. A system according to claim 3 in which the RVLs are calculated as predetermined variations from the captured RI.
5. A system according to claim 4 which permits the end-user to reset or reprogram the RI and/or the RVLs.

6. A system according to claim 5 in which the momentum is communicated in time display format or is received and computed by the receiver of the user into a time display format based on signals of matches to the reference input (RI) or one or more of the reference variable levels (RVLs).
7. A system according to claim 6 in which the identification of the required variable data input by the user may be by digital mobile telephone (utilising WAP and SMS gateway), internet, intranet or general telecommunications network (telephone).
8. A system according to claim 7 in which the communication of any match between the live data values and the calculated RVLs to the end-user is by SMS.
9. A system according to claim 2 which enables only one advice message to be generated in succession for each RVL trigger previously calculated such that if an advice message has been generated from the triggering of a specific RVL this same advice message can only be generated again once another RVL has first been triggered
10. A variable momentum monitoring system including the steps of:
  - receiving from a user an identification of a required variable data input and an identification of a required proportional variation of the variable;
  - obtaining the current live static value (LSV) of the identified required data input from a live data-stream and determining it as a base reference input (RI);
  - calculating two sets of one each of incremental reference variable levels (RVLs) using the determined RI and the user's identified required proportional variation, one of the sets having a value proportionally less than the RI and the other set having a value proportionally greater than the RI;
  - searching dynamic live data values (LDV) of the identified required data and comparing with the RVLs;
  - communicating to the user when the current live value of the identified required data matches with either of the RVLs; and

resetting the RI to the value of the matched RVL and recalculating the two RVLs using the reset RI and the user's identified required proportional variation.

11. A system according to claim 10 in which the proportional variation can be set at any value between 0-999%.
12. An automatic telecommunications based price momentum monitoring system which comprises stock exchange (SX) stock code data input by a user via mobile handset or website in which:
  - an SX code is logged;
  - a proprietary trading combination (PTC) reader captures the live SX price for the logged SX code as a reference price (RP) and time and date stamps the entry and reconciles customer account details in a telecommunications provider's network;
  - the PTC reader immediately calculates two sets of price momentum levels (PMLs) using the captured RP of each logged SX code, one set above the RP and the other set below the RP;
  - the system searches for price matches between SX live feed and PMLs and when a match is detected the system sends a telecommunication to the user; and
  - the RP is automatically reset as the price of a stock moves out of the PML alert range (i.e. beyond either the upper PML or the lower PML) so as to enable the system to be automatic and ongoing.
13. A system according to claim 12 in which the reset function can be facilitated by the end-user at any time manually.